



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300



Photometric Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-2002

Prepared For
Auroralight Inc

2742 Loker Avenue West
Carlsbad
CA, 92010
United States

Catalog Number

HPL8-2-30

Order Number

11745044

Test Number

11745044.22

Test Date

2017-05-16

Prepared By

Javier Caban, Technician

Approved By

Tiffany Hamm, Project Handler

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Conical 8" copper shade with clear glass lens, cylindrical copper stem and brass base
Lamp: 64 white LEDs
Mounting: Path/Area
Ballast/Driver: Integrated

Luminaire



Luminaire Characteristics

Luminous Diameter: 8.00 in.

Summary of Results

Roadway Classification: Type V, Very Short
Cutoff Classification: Semicutoff
BUG Rating: B0 U1 G0

Test Conditions

Test Temperature: 25.7 °C
Voltage: 12.00 VAC
Current: 0.2864 A
Power: 2.137 W
Power Factor: 0.622
Frequency: 60 Hz
Current THD: 88.1 %

Tested in 30 planes left side, 30 planes right side, left and right averaged
Vertical test increments are 2.5 degrees
Test distance exceeds five times the greatest luminous opening of luminaire

Laboratory results may not be representative of field performance
Ballast factors have not been applied



Distribution - Goniophotometer

Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.7 °C	12.00 VAC	0.2864 A	2.137 W	0.622	60 Hz	88.1 %

Summary of Results

Spacing Criteria

0-180: 1.25
90-270: 1.25

Total Lumen Output:

120.6 Lumens

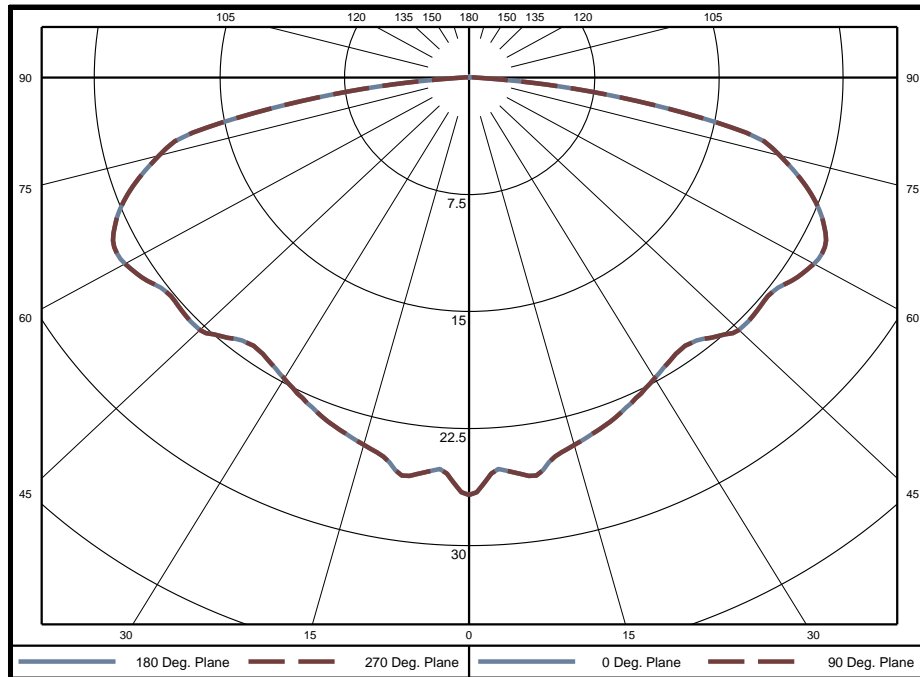
Luminaire Efficacy:

56.4 lm/w

Maximum Candela:

27 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0.61	0.5%	60-65	11.61	9.6%	120-125	0.01	0.0%
5-10	1.83	1.5%	65-70	11.53	9.6%	125-130	0.01	0.0%
10-15	2.94	2.4%	70-75	10.76	8.9%	130-135	0.01	0.0%
15-20	3.96	3.3%	75-80	9.12	7.6%	135-140	0.01	0.0%
20-25	4.90	4.1%	80-85	4.52	3.7%	140-145	0.01	0.0%
25-30	5.72	4.7%	85-90	0.70	0.6%	145-150	0.01	0.0%
30-35	6.45	5.3%	90-95	0.14	0.1%	150-155	0.01	0.0%
35-40	7.21	6.0%	95-100	0.05	0.0%	155-160	0.01	0.0%
40-45	8.30	6.9%	100-105	0.03	0.0%	160-165	0.01	0.0%
45-50	9.24	7.7%	105-110	0.02	0.0%	165-170	0.00	0.0%
50-55	9.93	8.2%	110-115	0.02	0.0%	170-175	0.00	0.0%
55-60	10.88	9.0%	115-120	0.01	0.0%	175-180	0.00	0.0%

Zone	Lumens	% of Luminaire
0-40	34	27.9%
0-60	72	59.7%
0-90	120	99.7%
90-180	0	0.3%



Candela Tabulation

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
	0	26.74	26.74	26.74	26.74	26.74	26.74	26.74	26.74	26.74	26.74	26.74	26.74	26.74	26.74	26.74
	5	25.27	25.27	25.27	25.27	25.27	25.27	25.27	25.27	25.27	25.27	25.27	25.27	25.27	25.27	25.27
	10	25.54	25.54	25.54	25.54	25.54	25.54	25.54	25.54	25.54	25.54	25.54	25.54	25.54	25.54	25.54
	15	24.37	24.37	24.37	24.37	24.37	24.37	24.37	24.37	24.37	24.37	24.37	24.37	24.37	24.37	24.37
	20	23.74	23.74	23.74	23.74	23.74	23.74	23.74	23.74	23.74	23.74	23.74	23.74	23.74	23.74	23.74
	25	23.02	23.02	23.02	23.02	23.02	23.02	23.02	23.02	23.02	23.02	23.02	23.02	23.02	23.02	23.02
	30	22.24	22.24	22.24	22.24	22.24	22.24	22.24	22.24	22.24	22.24	22.24	22.24	22.24	22.24	22.24
	35	21.61	21.61	21.61	21.61	21.61	21.61	21.61	21.61	21.61	21.61	21.61	21.61	21.61	21.61	21.61
	40	21.85	21.85	21.85	21.85	21.85	21.85	21.85	21.85	21.85	21.85	21.85	21.85	21.85	21.85	21.85
	45	22.87	22.87	22.87	22.87	22.87	22.87	22.87	22.87	22.87	22.87	22.87	22.87	22.87	22.87	22.87
	50	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80
	55	23.09	23.09	23.09	23.09	23.09	23.09	23.09	23.09	23.09	23.09	23.09	23.09	23.09	23.09	23.09
	60	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87
	65	23.58	23.58	23.58	23.58	23.58	23.58	23.58	23.58	23.58	23.58	23.58	23.58	23.58	23.58	23.58
	70	21.83	21.83	21.83	21.83	21.83	21.83	21.83	21.83	21.83	21.83	21.83	21.83	21.83	21.83	21.83
	75	19.28	19.28	19.28	19.28	19.28	19.28	19.28	19.28	19.28	19.28	19.28	19.28	19.28	19.28	19.28
	80	13.17	13.17	13.17	13.17	13.17	13.17	13.17	13.17	13.17	13.17	13.17	13.17	13.17	13.17	13.17
	85	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74
	90	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
	95	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
	100	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	105	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	110	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
	115	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	120	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	125	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	130	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	135	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	140	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	145	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	150	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
	155	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
	160	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
	165	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
	170	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
	175	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
	180	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

Vertical Angle (Degrees)		0	45	90
	0	825	825	825
	45	998	998	998
	55	1242	1242	1242
	65	1721	1721	1721
	75	2298	2298	2298
	85	1324	1324	1324



Utilization of Lumens - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%																	
Ceiling Cavity Reflectance	80				70				50			30			10		
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																
0	143	143	143	143	140	140	140	140	134	134	134	128	128	128	123	123	123
1	127	119	112	106	123	116	110	104	111	106	101	106	102	98	101	98	95
2	112	100	89	81	109	97	88	79	93	84	77	88	82	75	84	79	74
3	100	85	73	63	97	83	71	62	79	69	61	75	67	60	72	65	59
4	91	73	61	51	87	72	60	51	68	58	50	65	56	49	62	55	48
5	82	64	52	42	80	63	51	42	60	50	42	58	48	41	55	47	40
6	76	57	45	36	73	56	44	36	54	43	35	51	42	35	49	41	35
7	70	51	39	31	67	50	39	31	48	38	31	46	37	30	45	36	30
8	65	47	35	27	63	46	35	27	44	34	27	42	33	27	41	33	26
9	60	42	32	24	58	42	31	24	40	31	24	39	30	24	37	29	24
10	56	39	29	22	55	38	28	22	37	28	21	36	27	21	35	27	21

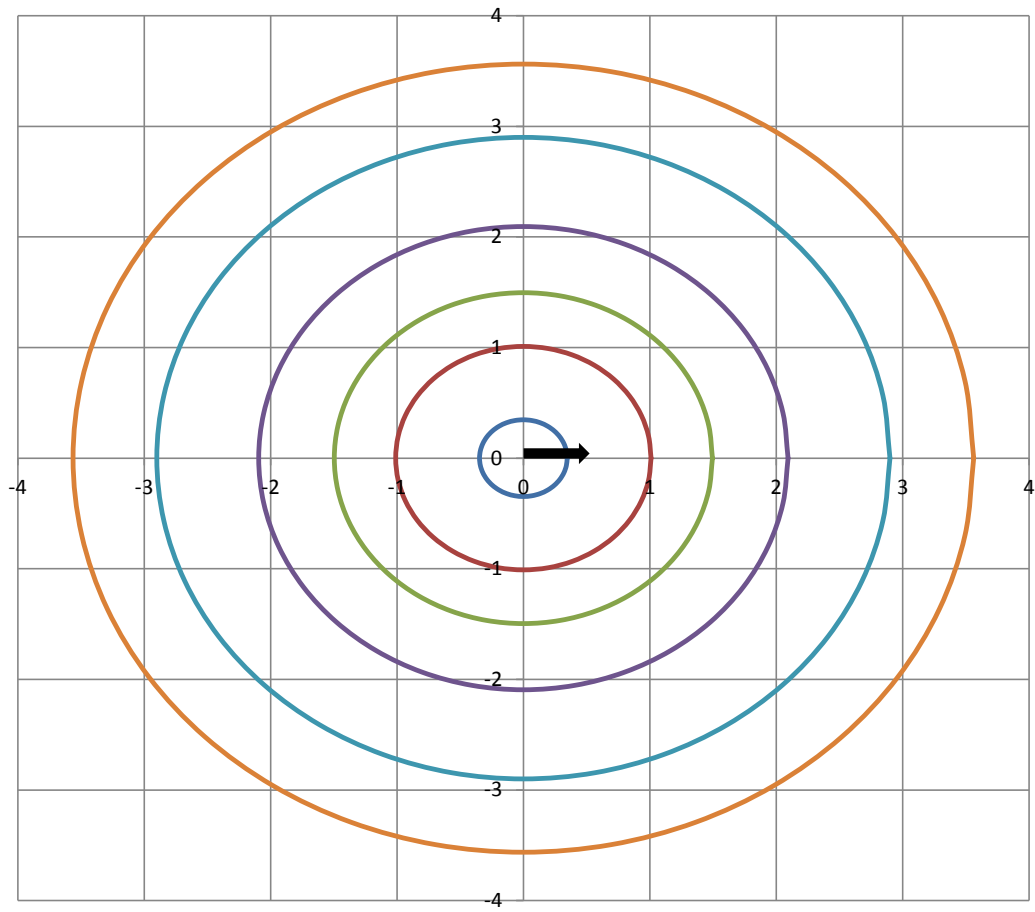
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	26.74 Candela
Central Cone Intensity:	26 Candela
Beam Flux:	114.8 Lumens
Beam Angle (0-180):	159.8 Degrees
Beam Angle (90-270):	159.8 Degrees
Field Angle (0-180):	171.3 Degrees
Field Angle (90-270):	171.3 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		1.67	5.01
6.00		0.743	7.51
8.00		0.418	10.0
10.0		0.267	12.5
12.0		0.186	15.0
14.0		0.136	17.5
16.0		0.104	20.0



ISOFootcandle Plot

Mounting Height - 2 Feet



Grid Lines in Units of Mounting Height





IES "BUG" Rating
(Back Light, Uplight, Glare)
Per IES TM-15-11



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	10.0	8.2%
FM	(30-60)	26.1	21.5%
FH	(60-80)	21.6	17.8%
FVH	(80-90)	2.7	2.2%
BL	(0-30)	10.0	8.2%
BM	(30-60)	26.1	21.5%
BH	(60-80)	21.6	17.8%
BVH	(80-90)	2.7	2.2%
UL	(90-100)	0.2	0.2%
UH	(100-180)	0.2	0.2%
Total		121.2	100.0%
BUG Rating	B0 U1 G0		